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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C.

MAR 24 2004

In re:

Amendment of Section 73.622
Table of Allotments
DTV Broadcast Stations
Kalispell, Montana

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

MB Docket No. _____

To: The Secretary, FCC
Attn: Chief, Allocations Branch
Policy and Rules Division

PETITION FOR RULEMAKING

Montana State University ("MSU"), by its counsel and pursuant to Section 1.420 of the Commission's Rules, hereby requests that the Commission institute a rulemaking proceeding to amend Section 73.622 of its Rules to allot Channel *46 as a new DTV channel at Kalispell, Montana, and to reserve it for noncommercial educational use. Such an allotment would serve the public interest by providing the city of Kalispell with its first local noncommercial educational digital television channel and the surrounding areas with high quality public television programming. MSU commits to apply for DTV Channel *46 at Kalispell, if allotted and reserved for noncommercial use.

Background

MSU is a public institution of higher education in the state of Montana. It was founded as a land-grant college in 1893. MSU's home campus is located in Bozeman, Montana, community of license to MSU's noncommercial educational television station KUSM(TV). MSU also maintains three affiliate campuses located in the state, including MSU-Billings, MSU-Northern and MSU College of Technology-Great Falls. MSU's stated mission is to provide a

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television white area, in furtherance of the Congressional mandate in Section 396 of the Communications Act.¹

The Commission recognizes the value of local programming, especially with respect to noncommercial educational broadcasting. *See, e.g., Educational TV Assignment at Terre Haute, Indiana*, 19 RR 2d 1850, 1853 (1970) (“We have repeatedly announced our policy to forward local programming in the broadcast services. Local programming is essential particularly in the field of education in that local programming can most effectively deal with the specific problems, needs, and interests in the community being served.”)

DTV Channel *46 at Kalispell, Montana, Should Be Reserved for Noncommercial, Educational Use

The purpose of this petition is to allot a channel, for which MSU intends to apply, to provide Kalispell with its first noncommercial educational DTV channel. Reservation of Channel *46 for noncommercial educational use would make possible the enhanced provision of noncommercial and educational programs in the area. Moreover, in accordance with the requirements of Section 73.622(a), the proposed allotment would provide a first noncommercial educational service to 143,020 persons.

Conclusion

For all of these reasons, MSU requests that the Commission institute a rulemaking proceeding to amend Section 73.622 of its Rules to allot DTV Channel *46 to Kalispell, Montana, and to reserve it for noncommercial educational use.

¹ “It is in the public interest for the Federal Government to ensure that all citizens of the United States have access to public telecommunications services through all appropriate available telecommunications distribution technologies.” 47 U.S.C. § 396(a)(9).

challenging and richly diverse learning environment in which the entire university community is fully engaged in supporting student success; to provide an environment that promotes the exploration, discovery, and dissemination of new knowledge; to provide a collegial environment for faculty and students in which discovery and learning are closely integrated and highly valued; and to serve the people and communities of Montana by sharing its expertise and collaborating with others to improve the lives and prosperity of Montanans.

In furtherance of its educational mission, MSU utilizes Station KUSM to broadcast high quality educational, informational and cultural programming, including children's programming, locally-produced broadcasts and PBS offerings. MSU has been providing public TV service to the KUSM viewing area since 1984. MSU now hopes to further its educational mission by providing the only noncommercial educational DTV programming service based in Kalispell. Most importantly, the addition of the Kalispell DTV station allotment proposed herein would eliminate noncommercial educational television white area in portions of Montana by providing a first noncommercial educational television service to local residents. *See* attached Engineering Statement at 2. The proposed DTV operation on Channel 46 at Kalispell would provide a first educational television service to an area of 40,460 square kilometers and a population of 143,020 persons. *Id.*

In support of this petition, MSU submits the following:

The Allotment of DTV Channel *46 to Kalispell, Montana Satisfies Technical and Regulatory Requirements

The present proposal satisfies the minimum geographic spacing requirements with regard to all other DTV stations, DTV allotments, and analog TV stations. *See* Engineering Statement at 1. The reference coordinates for the proposed site are N. 48°-00'-48"; W. 114°-21'-55" (NAD27).

In addition, as the attached engineering statement demonstrates, this request is in compliance with the community coverage requirements of Section 73.625(a), assuming a power/height combination of no more than 187 kw/830 m HAAT. Accordingly, the allotment of DTV Channel *46 at Kalispell complies with the requirements of Section 73.623 of the Commission's Rules.

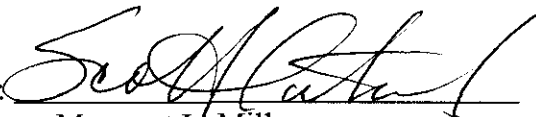
Moreover, this proposal complies with Section 73.622(a) of the Commission's Rules with respect to the initiation of a rulemaking proceeding to add an unoccupied DTV channel to the Table of Allotments and to reserve that channel for noncommercial educational use. As detailed above and in the attached Engineering Statement, this allotment would provide a first noncommercial educational TV service to 143,020 persons. These 143,020 persons represent the entire population within the 41 dBu contour of the proposed Kalispell Channel 46 allotment. *See* Engineering Statement at 2 and E-1. Therefore, the proposed allotment will provide a first noncommercial educational television service to more than 2,000 people who constitute more than 10% of the population within the proposed noise limited contour. The proposal thus complies with Section 73.622(a) of the Commission's Rules.

Allotment of DTV Channel *46 to Kalispell, Montana Would Provide the Kalispell Area with a Valuable Source of Noncommercial Educational Programming

At present, there is no noncommercial educational DTV allotment for Kalispell, Montana. The allotment of DTV Channel *46 to Kalispell would therefore provide the city with its only noncommercial educational digital television facility. Moreover, as demonstrated above, the new DTV allotment in Kalispell would significantly reduce noncommercial educational

Respectfully submitted,

MONTANA STATE UNIVERSITY

By: 

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March 24, 2004

ENGINEERING STATEMENT
PETITION FOR RULE MAKING
SECTION 73.622 OF THE FCC RULES
ON BEHALF OF
MONTANA STATE UNIVERSITY
NEW-DT, KALISPELL, MONTANA
CHANNEL 46 187 KW 830 METERS HAAT

MARCH 2004

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

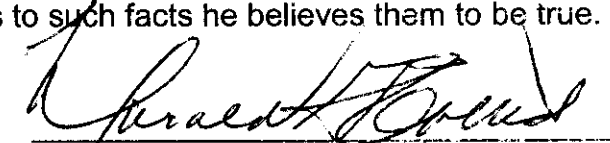
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

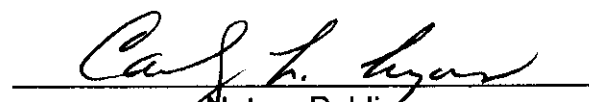
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 23rd day of March, 2004.



Notary Public

My Commission Expires: 2/28/2008

This engineering statement has been prepared on behalf of Montana State University, licensee of television station KUSM-TV, NTSC Channel 9, Bozeman, Montana. It is proposed to add a digital television channel educational allotment to Section 73.622 of the FCC Rules for UHF Channel 46 at the maximum UHF-DT non-directional power of 187 kW and a height above average terrain of 830 meters to serve Kalispell, Montana. The resulting service area encompasses the entire community of Kalispell per Section 73.625(a). The allocation study has been performed in accordance with Section 73.623(d) of the FCC Rules.

A detailed interference and spacing analysis is provided in Table I to assess of the impact of this proposal on other authorized NTSC stations, DTV allotments listed in Appendix B, and other proposed DTV allotment changes.

<u>DTV CH</u>	Effective Radiated <u>Power</u> kW	<u>HAAT</u> meters	<u>RCAMSL</u> meters
46*	187	830	2083

North Latitude: 48° 00' 48"

West Longitude: 114° 21' 55"

NAD-27

*Reserved Educational Channel

As shown in Table I, the addition of the DTV allotment for Channel 46 meets the criteria under Section 73.623(d) of the FCC's Rules. Further, an examination of co-channel low power television and translator stations within 100 km has been performed. No other authorized low-power or translator station is found.

Per Section 73.622(a) of the FCC Rules, an examination of other full-service educational service in the area of Kalispell has been conducted. It is determined that the proposed DTV operation on Channel 46 will provide the first educational service to:

- a land area of 40,460 sq. km and,
- a population of 143,020 (based on 2000 Census data)

Exhibit E-1 depicts the proposed service within the predicted 48 dBu and 41 dBu contours.

Therefore, it is believed that the request for DTV channel will be consistent with the FCC Rules.

TABLE I
DOMESTIC INTERFERENCE SUMMARY
NEW-DT, KALISPELL, MONTANA
CHANNEL 46 187 KW 830 METERS HAAT
MARCH 2004

Interference Analysis

A study of predicted interference by the proposed NEW DT service has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (July 2, 1997) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Windows/Intel platform. Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, e.g., new interference equals total interference less baseline interference. The effect is further reduced for ratios of calculated population values, e.g., incremental population affected as a percent of total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km² using 3-second terrain data sampled approximately every 0.1 km at one degree azimuth intervals with 1990 census centroids.

The following conditions were investigated:

Proposed Addition: New DT, UHF Channel 46, a height of 830 meters HAAT (2083 meters RCAMSL) and an ERP of 187 kW omni-directional at: N 48° 00' 48", W 114° 21' 55" (NAD-27). Tower registration number: 1000780

Interference Results

<u>Affected Station</u>	<u>Distance/Bearing</u>	<u>Interference Caused</u>
		<u>New</u>
KCDT-DT (Allot), Channel 45 Coeur d'Alene, ID	179 km/260.8°	0.0%
KCDT (CP mod), Channel 45 BMPEDT-20020429AAK Coeur D'Alene, ID	179 km/260.8°	0.0%

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TABLE I
DOMESTIC INTERFERENCE SUMMARY
NEW-DT, KALISPELL, MONTANA
CHANNEL 46 187 KW 830 METERS HAAT
MARCH 2004
(continued)

<u>Affected Station</u>	<u>Distance/Bearing</u>	<u>Interference Caused</u>
		<u>New</u>
KTGF (CP), Channel 45 BPCDT-19991101AIO Great Falls, MT	229 km/100.3°	0.0%
KTGF-DT (Allot), Channel 45 Great Falls, MT	229 km/100.3°	0.0%

TABLE II
INTERNATIONAL INTERFERENCE SUMMARY
NEW-DT, KALISPELL, MONTANA
CHANNEL 46 187 KW 830 METERS HAAT
MARCH 2004

Allocation Study Based on Spacing Criteria

<u>Call</u>	<u>City/State</u>	<u>CH</u>	<u>ERP</u> kW	<u>HAAT</u> meters	<u>Coordinates</u>	<u>Distance</u>		<u>New IF</u>
						<u>Required</u> km	<u>Actual</u> km	
CKAL-DT-1	Lethbridge, AB	46	1000	325	49°44'10" 112°48'09"	266	223.3	0.0%

COHEN, DIPPELL AND EVERIST, P.C. CONSULTING ENGINEERS

